US ERA ARCHIVE DOCUMENT

# Recent Trends in Mercury Use in Products: Summary of the IMERC Database



### **About IMERC**

14 Current State Members: CA, CT, <u>IL</u>, LA, MA, ME, <u>MN</u>, NC, NH, NJ, <u>NY</u>, RI, VT, WA



### **About IMERC**

- IMERC is a program of the Northeast Waste Management Officials' Association (NEWMOA), which provides logistical, facilitation, and technical support
- "...established to help [states] implement laws and programs aimed at getting mercury out of consumer products, the waste stream, and the environment."

### **IMERC Services**

#### IMERC provides:

- Ongoing technical & programmatic assistance to states that have enacted mercury education and reduction legislation
  - Notification
  - Labeling
  - Phase-out
  - Enforcement
- A single point of contact for industry and the public for information on mercury-added products & member states' legislation

# IMERC Product Notification Requirements

Required by 8 States and intended to inform consumers, recyclers, policy makers, and others about:

- Products that contain intentionally-added mercury
- The total amount of mercury in a specific product
- The total amount of mercury in the specific products sold in the U.S. in a given year

### **Frequency of Reporting**

- Minimum reporting required every three years during triennial notification period
- 2001 Initial triennial year (baseline)
- Triennial Notification Forms due for 2004, 2007, 2010, etc.
- Updated Notification Forms due when products change: increase or decrease in amount of mercury, elimination of mercury-added product, introduction of new product

# Mercury-added Products Database

- Database 450 companies & 4,200 products (2001 and 2004 data)
- Complex data set and complex database
- Constantly adding new companies and products

www.newmoa.org/prevention/mercury/imerc/Notification/index.cfm

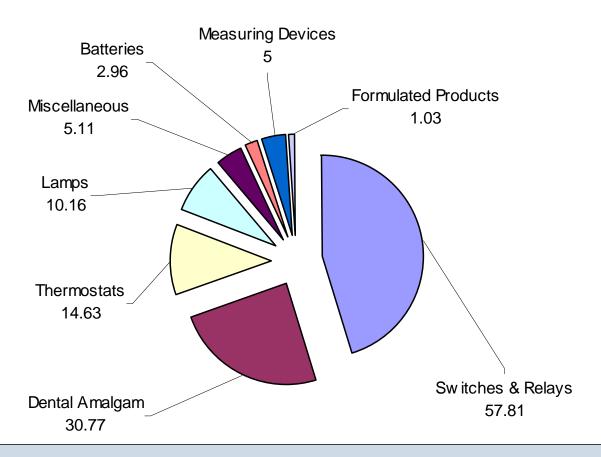
### Mercury Use in Products Report

### All OEM Products in Database placed into following categories:

- Switches & Relays
- Dental Amalgam
- Lamps
- Thermostats
- Batteries
- Measuring Devices (Thermometers, Barometers, Blood Pressure Cuffs)
- Formulated Products
- Miscellaneous

# 2001 Mercury Use in Products – 127.5 Tons

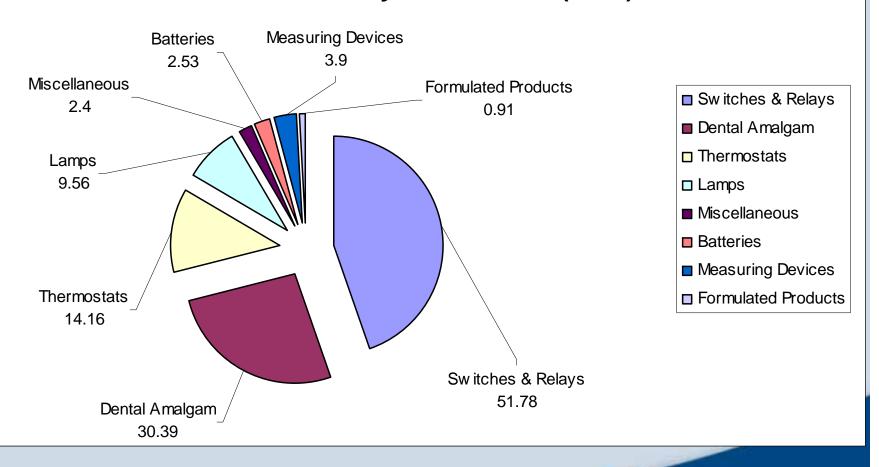
#### **2001 Total Mercury in Products (tons)**



- Sw itches & Relays
- Dental Amalgam
- □ Thermostats
- Lamps
- Miscellaneous
- Batteries
- Measuring Devices
- □ Formulated Products

# 2004 Mercury Use in Products – 115.7 Tons

#### **2004 Total Mercury in Products (tons)**



# Total Mercury Sold in U.S. by Product Category

### Total Amount of Mercury Sold in Fabricated And Formulated Products in the U.S. For Calendar Years 2001 and 2004

Products/Components	Total Mercury Sold in U.S. (tons)		Change Detyroon Voorg
	2001	2004	<b>Change Between Years</b>
Switches & Relays	57.81	51.78	(6.03)
Dental Amalgam	30.77	30.39	(0.38)
Thermostats	14.63	14.16	(0.47)
Lamps	10.16	9.56	(0.60)
Miscellaneous	5.11	2.40	(2.71)
Batteries	2.95	2.53	(0.42)
Chemicals and Solutions	1.03	0.91	(0.12)
Sphygmomanometers**	2.15	1.11	(1.04)
Thermometers**	1.70	1.40	(0.30)
Manometers**	0.97	1.27	0.30
Barometer**	0.18	0.12	(0.06)
Total Pounds of Mercury Sold	~ 127.5 tons	~ 115.7 tons	(11.84) tons

# Mercury Reduction Success in the Northeast

- Published a report quantifying impacts of mercury reduction initiatives in the Northeast
- Focus on mercury collection & restrictions on the sale of targeted products
  - ~7.5 tons of mercury collected
  - ~14 tons eliminated

# Northeast Mercury Collection: 2000 – 2006

### Mercury Collection and Recycling in the Northeast States: 2000 - 2006

Collection Activity	Mercury Collected and Recycled (Pounds)	
School Collection Programs	4,696 (456 schools)	
Auto Switches	267.5 (over 120,000 switches)	
Dental Office Collection	2,151	
Thermostats	458	
Hospitals	761	
HHW Collection	6,092	
Fever Thermometers	352 (over 200,000 thermometers)	
Dairy Manometers	140	
Total	<b>14,900 pounds</b> (~7.5 tons)	

### Northeast States' Product Phaseouts and Bans

- CT Fabricated product >100 mg Hg; Formulated product >50 ppm
- RI Fabricated product >100 mg Hg; Formulated product >50 ppm
- ME Thermostats, measuring devices, switches and relays
- MA Thermostats, measuring devices (2008); Switches and relays (2009)
- NH Thermostats, measuring devices, switches and relays (2008)
- VT Measuring devices, neon signs, switches and relays
- NY Measuring devices; Switches and relays (2008)

# National Mercury Reductions: 2001 – 2006

#### **Cumulative Amount of Mercury Discontinued by** Manufacturers, 2001-2006 **Total Amount of Mercury Discontinued** Year (tons) 0.89 2002 2003 1.63 2004 2.78 3.06 2005 2006 3.27 ~ 11.6 tons (23,245 lbs.) **Total**

### Projected N.E. Mercury Reductions: 2004 – 2006

# Projected Total Mercury Reduction (2004-2006) Resulting from Northeast State Restrictions on the Sale of Mercury-added Products

Product	Total Amount of Mercury Discontinued (tons)
Switches & Relays	1.93
Thermostats	0.57
Sphygmomanometers	0.07
Thermometers	0.06
Other Measuring Devices	0.06
Total	<b>~2.7 tons</b> (5,390 lbs.)

### **More information**

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www.newmoa.org/prevention/mercury/imerc.cfm